

Letter to the Editor

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To the editor: I have with great interest read the article from Martina Mirlacher *et al*¹ on: 'Influence of slide aging on results of translational research studies using immunohistochemistry' in *Mod Pathol* 2004;**17**:1414–1420.

However, I have some worries with regard to the relation between the investigated factors and survival. First, with regard to HER2-status, the survival curve is 'opposite' of what is normally seen, in the present investigation HER2-positive patients have a better survival than HER2-negative patients, although they end up the same. The figures are also different from what is normally seen, with more HER2-positive patients than HER2-negative. Could it be a matter of a printing error, with an 'unintended' swap between HER2-positive and HER2-negative? Furthermore, it is stated that statistical significance is preserved, even in the old sections. This is not in accordance with the *P*-values given in the survival curves, where the *P*-value for fresh cut sections is 0.019 and for old cut sections 0.29.

With regard to the hormone receptors again there is a discrepancy between the *P*-values given in the text and the ones given in the curves. In the text the *P*-value for ER is 0.09, whereas it is 0.11 in the curve

and for PR the values are stated to be 0.11 and 0.14, respectively.

In the discussion, the authors conclude that even though age has a great impact on the immunohistochemical reaction, the clinicopathological relation is maintained. This conclusion is in contrast to their findings, where all statistical significant relations between the investigated factors and survival disappear in the old sections. In my opinion their conclusion should be that fresh cut sections are mandatory for at least a number of IHC-detected prognostic and predictive factors, if the results in translational studies are to be trustworthy.

Birgitte B Rasmussen

*Department of Pathology,
Roskilde County Hospital,
Roskilde DK-4000, Denmark*

Reference

- 1 Mirlacher M, Kasper M, Storz M, *et al*. Influence of slide aging on results of translational research studies using immunohistochemistry. *Mod Pathol* 2004;**17**: 1414–1420.